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THE LOST TYPE SPECIES OF
ELYTROPAPPUS CASS.

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The type of the genus *Elytropappus* Cass. is *Elytropappus hispidus* (L.f.) Druce. The younger Linnaeus described it as *Gnaphalium hispidum* L.f. from a Thunberg specimen collected in "Bockland" (cf. Levyns 1935, 1939). In her revision of the genus, Levyns (1935 p. 90) notes, that the species "has not been collected since its discovery by Thunberg", and it is generally regarded as one of Thunberg's "lost species".

In 1917 Hutchinson described a plant from the Giftberg as *Ifloga setulosa* Hutch. This was collected by Phillips on the Percy Sladen Memorial Expedition in 1911. An examination of the type material reveals, that the plant is in reality a species of *Elytropappus* and no doubt identical to the long-lost *E. hispidus* (L.f.) Druce.

We know from Thunberg's travels that his "Bockland" is part of the Bokkeveld Mountains escarpment near the valley of the Doorn River, that has its sources in the Hantam Mountains (not to be confused with the Doorn River south of the Giftberg). It also appears that Thunberg must have collected the plant in November 1774 (cf. Karsten 1939, p. 147).

The Giftberg and the Bokkeveld Mountains mentioned are geologically and ecologically very similar and the distance between the two localities may be estimated at about 40 miles.

Elytropappus hispidus (L.f.) Druce and *E. cyathiformis* DC. constitute "Section 1" of the genus in Levyns' revision (Levyns 1935). This section is characterized by the capitula being massed together in terminal rounded clusters. The cm.-long distinctly setose leaves of *E. hispidus* (L.f.) Druce readily serve to distinguish this species from *E. cyathiformis* DC. The leaves of the latter are about half the length and often glandular but not hispid or setose. The distribution of the two species is shown in Map 1 based on the material in BOL, NBG and SAM. A comparison with Weimarck's distribution map of *E. cyathiformis* DC. (Weimarck 1941, map 231) shows that in the last decades a rich material of this species has been accumulated (see Appendix).

A description and drawings of *E. hispidus* (L.f.) Druce are given below based on Phillips' specimens (the type material of *Ifloga setulosa* Hutch.).

Elytropappus hispidus (L.f.) Druce in Rep. Bot. Exch. Cl. Brit. Isles, 1916, p. 621 (1917).

Gnaphalium hispidum L.f., Suppl., p. 363 (1781).

Elytropappus spinellosus Cass., Bull. Soc. Philom., p. 199 (1816).

E. spinulosus Less., Syn. Comp., p. 343 (1832).

Metalasia hispida Don, Mem. Wern. Soc., V, p. 557 (1826).

Ifloga setulosa Hutch., Ann. S. Afr. Mus., IX, p. 372 (1917).

A branched *shrub*, thinly cobwebby or woolly esp. on the younger branches. *Leaves* erecto-patent, linear-filiform, subterete, 8—15 mm. long, c. 1 mm. thick, mucronate, normally twisted; upper surface narrow, woolly; lower surface larger, glabrescent, setose with $\frac{3}{4}$ —1 mm. long spreading hairs. *Capitula* 5—7 mm. long, 3—4 mm. in diam., massed 6—10 together in terminal rounded clusters. *Involucral bracts* imbricate, scarious, acuminate, often with pink or reddish tips; outer shorter and laxly woolly at the back; inner glabrous and with denticulate-fimbriate margins near the tips. *Florets* 6—8. *Corolla* tubular, c. 4 mm. long; corolla lobes with thickened margins and scattered hairs on the outsides. *Anthers* 2·5 mm. long incl. appendage and tails. Appendage lanceolate, 0·5 mm. long. Tails filiform, somewhat lacerate, 0·5 mm. long. *Style* branches 1 mm. long, with truncate penicillate tips. *Ovary* glabrous, transversely wrinkled. *Pappus* bristles c. 15, erect, densely plumose, white. Outer *pappus* a short cup-shaped annulus.

HOLOTYPE. Bockland, *Thunberg* (UPS, *non vidi*).

APPENDIX: MATERIAL EXAMINED

Elytropappus hispidus (L.f.) Druce.

VAN RHYNSDORP. Giftberg, 1,000—2,000 ft., 18.ix.1911, *E. P. Phillips* 7438 (BOL, SAM).

Elytropappus cyathiformis DC.

LAINGSBURG. Witteberg, Bantams, 5,000 ft., 27.x.1941, *Compton* 12139 (NBG).

WORCESTER. De Straat, 3,000 ft., 26.ix.1936, *Compton* 6476 (BOL, NBG).

CERES. Elands Kloof, 4,000 ft., iv.1935, *Levyms* (BOL); 15.xii.1935, *Levyms* 5111 (BOL, SAM); 29.ix.1944, *Compton* 16170 (NBG). Roodeberg, 6,000 ft., i.1940, *Esterhuysen* 1514 (BOL); 27.xii.1952, *Esterhuysen* 20923 (BOL). Conical Peak, xii.1940, *Stokoe* (SAM). Baviaansberg, 5,300 ft., 2.i.1942, *Compton* 12857 (NBG). De Keur, 11.xi.1946, *Compton* 18789 (NBG); *Leighton* 2886 (BOL). Gydoberg, 10.xi.1946, *Leighton* 2231 (BOL). Schurweberg, 3,000 ft., 11.x.1952, *Esterhuysen* 20638 (BOL). Visgat, between Schurftberg and Gt. Winterhoek Mts., x.1953, *Stokoe* (SAM). Kleinveld, 1.x.1958, *Esterhuysen* 27916 (BOL).

CLANWILLIAM. Tafelberg, 5,500 ft., 22.i.1897, *Schlechter* 10103 (BOL). Elands Kloof, 26.iv.1936, *Lewis* (BOL); 3.x.1940, *Compton* 9675 (NBG); *Esterhuysen* 3281 (BOL); 3,000 ft., 17.xi.1941, *Compton* 12482 (NBG). Sneeuwkop, 5,500 ft., 12.ii.1936, *Compton* 6162 (NBG). Wabooms River, 3,000 ft., 25.xi.1936, *Compton* 6477 (NBG). Between Groot Rivier and Elands Kloof, x.1939, *Leipoldt* 3264 (BOL). Langberg, 5,500 ft., 15.xii.1941, *Compton* 12756 (NBG), *Esterhuysen* 7302 (BOL, SAM). E. side of Sneeuwberg, 4,500 ft., 10.x.1946, *Esterhuysen* 13086 (BOL).

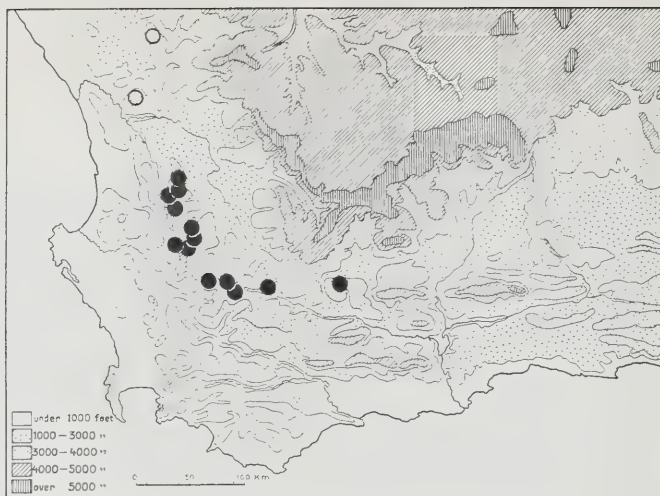
PIKETBERG. Twenty Four River Mts. above Porterville, 22.x.1949, *Esterhuysen* 16110 (BOL).

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 KARSTEN, M. C. 1939. Carl Peter Thunberg. An Early Investigator of Cape Botany. III. Travels. *Ibid.*
 WEIMARCK, H. 1941. Phytogeographical Groups, Centres and Intervals within the Cape Flora. *Lunds Univ. Årsskr.* N. F. Avd. **2**. 37: 5. Lund.



MAP 1. The distribution of *Elytropappus hispidus* (L.f.) Druce (open rings) and *E. cyathiformis* DC. (dots).

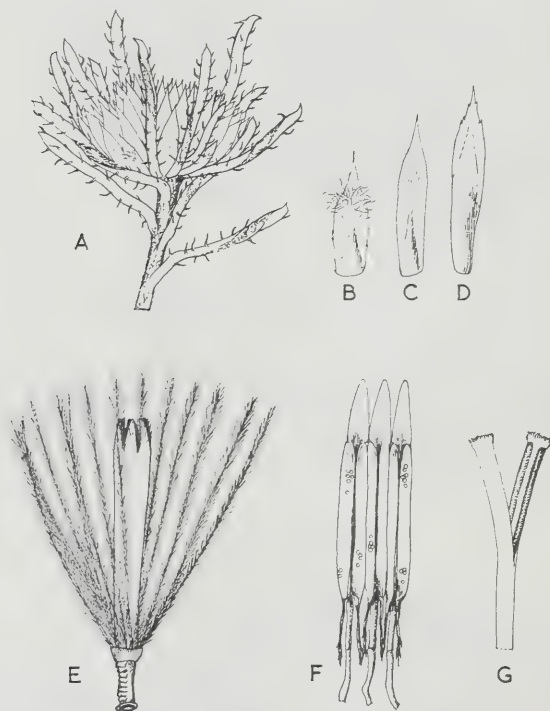


FIG. 1. *Elytropappus hispidus* (L.f.) Druce—Phillips 7438. A Branch tip with cluster of capitula, $\times 2$. B-D Outer, middle and inner involucre bracts, $\times 5$. E Floret, $\times 10$. F Anthers, $\times 20$. G Style branches, $\times 20$ —Del. auct.